

Quick Tips

Enhancing Classroom Understanding through Concept Checking Questions (CCQs) and Instruction Checking Questions (ICQs)

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INTRODUCTION

Creating an immersive target language environment is crucial for language learners. To achieve this, foreign language instructors should prioritize speaking the target language as much as possible. However, if the input is not comprehensible, it risks becoming background noise, potentially leading to student dissatisfaction and disengagement. In such cases, checking students' understanding is essential. Quick checks prompt instructors to repeat or rephrase instructions in more straightforward language. Educators can brainstorm effective checking methods independently or leverage generative AI tools like ChatGPT to support this process. Students are expected to provide quick and short answers in the target language or respond with movements. The primary goal of the strategy is to create an effective immersive environment in which students understand their instructors.

Over the past two decades, English educators such as Workman (2006), Darn and White (n.d.), Constantinides (2013), Heredia (2018a), and Gakonga (2021) have repeatedly pointed out that questions like "Do you understand?" "Is it clear?" or "OK?" are ineffective. First, out of respect, students may hesitate to suggest that their teacher's explanation was unclear (Constantinides, 2013). Additionally, they may not want to appear ignorant (Constantinides, 2013; Heredia, 2018a; Workman, 2006). Furthermore, students sometimes believe they understand when they do not (Gakonga, 2021; Heredia, 2018a; Workman, 2006). As a result, they may habitually respond with "yes" regardless of their actual understanding. Despite these shortcomings, many language teachers continue to regularly ask these questions.

An Evolution of the Terms CCQs and ICQs

How do we check students' understanding more effectively? Concept-checking questions (CCQs) and instruction-checking questions (ICQs) are highly recommended by language educators such as Marisa Constantinides (2013), Heredia (2018a; 2018b), and Gakonga (2021). Before these terms became popular, Workman (2006) defined concept questions as those generated to ensure students comprehend grammatical, lexical, or functional knowledge. Afterward, with an extension, CCQs were regarded as (a) questions instructors ask immediately after teaching something, such as grammar or expressions, and (b) questions instructors ask immediately after announcing a particular activity that may require further explanation (Constantinides, 2013). In recent years, the latter portion of Constantinides' (2013) definition above has been called instruction-checking questions (ICQs) (Gakonga, 2021; Heredia, 2018b) as it is about teachers' instructional directions instead of new knowledge.

CCQs and ICQs: Definitions and Examples

In this article, we adopt Heredia's (2018a; 2018b) definitions of CCQs and ICQs after reviewing the history of these terms.

First, CCQs (concept checking questions) are questions used to confirm that students fully understand the meaning of a vocabulary or grammar being taught (Heredia, 2018a). Unlike comprehension questions in reading or listening exercises, CCQs are specific to the lexicological and grammatical knowledge being inculcated. Note that they are not reading or listening comprehension *exercises* but rather are *interactions* designed to ensure the target point in the target language is explained effectively and understood by students. CCQs can be applied in various contexts, including checking students' understanding of language concepts, functions, vocabulary, and grammar.

For example, in a Chinese Mandarin class, we may introduce the term "996," which refers to working from 9:00 a.m. to 9:00 p.m., twelve hours a day, six days a week. This term reflects the long hours and high pressure of working in China. After introducing this concept in Mandarin, we may not be sure if the students fully understand it. If we simply ask, "Got it?" students may remain silent or give an unconvincing "yes." Instead, we can ask the following CCQs to check their understanding:

1. 第一个九表示什么？答案：上午九点。(What does the first nine represent? Answer: 9 a.m.)
2. 第二个九表示什么？答案：晚上九点。(What does the second nine represent? Answer: 9 p.m.)
3. 六表示什么？答案：一周工作六天。(What does six represent? Answer: working six days a week.)
4. 这个短语暗示着什么？答案：工作时间很长，并且无法选择。(What is the implication of the phrase? Answer: working for long hours without a choice.)

Second, ICQs (Instruction Checking Questions) are used to ensure that students understand the instructions or guidelines for an activity (Heredia, 2018b). These questions are particularly useful when the instructions are in the target language. ICQs can be employed in various contexts, such as information gap tasks, role plays, immersion activities, and more.

For instance, we may design an information gap activity in a reading class. The first question is for the whole class to answer, questions two through four are assigned to Group One, and questions five through seven are assigned to Group Two. It is possible that no student works on question one, or both groups work on the same set of questions.

Clear instruction is significant in such cases, but using a foreign language might complicate matters. This is where ICQs become particularly helpful. Examples of ICQs in this scenario include:

1. 谁做第一题？答案：每个人。(Who will work on Question One? Answer: Everybody.)
2. 第一组，你们做哪几道题？答案：一、二、三、四。(Group One, which questions do you work on? Answer: 1, 2, 3, 4.)
3. 第二组，你们做哪几道题？答案：一、五、六、七。(Group Two, which questions do you work on? Answer: 1, 5, 6, 7.)

If students do not answer correctly, the instructor should promptly clarify the information to prevent further confusion.

TIPS FOR CREATING CCQS AND ICQS MANUALLY

It might not be easy to initially think of CCQs and ICQs, and it probably takes time to prepare in advance. However, practice makes perfect, just like practicing a foreign language.

Use Simple Language

The most important tips are to avoid using complex language in the questions and ensure every student understands them. In other words, keep the questions simple and short (Darn & White, n.d.; Heredia, 2018a). The answers to the questions should also be brief so too much time is not taken (Darn & White, n.d.; Workman, 2006).

Learn about Possible Question Types

Regarding the question types, first, they could start with “what, which, where, who, and when” i.e., the wh- questions like the above examples in Mandarin class. When it is a “wh” question, teachers should be aware that students may need more time to process and should make sure the answer is not complex.

Second, it is crucial to note that the question could be, “Is ... a ...? Can ... do ...?” For instance, in Constantinides’ (2013) example of teaching the word “pet,” she asked, “Is a cat a pet? A dog? A

cow?” (para. 12). This questioning approach prevents the misunderstanding that “pet” only means “dog,” simply because the teacher used a dog picture to illustrate the word. We can further employ the structure, “Can they...?” for example, “Can they live in the wilderness without humans?” This question will lead to a simple answer: “No, they can’t.” These yes-or-no questions are particularly effective because they require minimal time and vocabulary to answer.

Also, the questions can begin with “Can you...” to request students show certain movement or point at an object or a picture. For example, “Can you point at something blue?” “Can you demonstrate stretching?” “Can you explain the activity in simple words?” These will check if students understand “blue,” “stretching,” and activity instructions.

Beyond questions, asking students to respond with true or false, saying partial sentences for students to complete, utilizing visual support such as pictures and timelines, requiring students’ physical responses, having students respond with antonyms, synonyms, examples, meanings in both the target language and English, and select the best translation can all contribute in various ways, provided they assess students’ understanding (Constantinides, 2013). Therefore, one caveat is that the checking methods may not be limited to questions alone, and other straightforward and less time-consuming approaches may be available. Questions that address metalinguistic concepts (e.g., discussing the result of a comparison) might be particularly challenging for students, in which case other comprehension checks may be preferred.

Predict Student Misunderstandings

Predicting challenges and possible misunderstandings will offer important clues when generating questions (Heredia, 2018b). For instance, the confusion in an information gap activity is predictable, so it is useful to ask ICQs to ensure teams are working on the correct task.

Specific Steps

Here are specific steps an instructor can follow when developing their own CCQs and ICQs independently, without using generative AI.

In the context of CCQs, consider the following:

1. *Identify areas where students might get confused:* What common misunderstandings might students have? What concepts are difficult for foreign language learners? [these can relate to grammar, vocabulary, cultural ideas, etc.]
2. *Brainstorm questions to uncover any student misunderstandings:* What questions might help guide their thinking on these issues? How can you tell if they really understand? [focus on specifics]
3. *Choose the best, most simple question to ask students:* How can I simplify this question further? Do students know all the words in the question and the grammar structure?
4. *Identify the correct answer(s) and ensure they will be clear for students:* Are the answers concise and straightforward? Will their answer tell me if they understand or not?

In the context of ICQs, consider the following:

1. What might students overlook in the instructions?
2. What questions might help them focus on this?
3. How can I simplify this question further?
4. Are the answers concise and straightforward?

AN EXPERIMENT WITH GENERATIVE AI


We can now use tools such as ChatGPT to generate CCQs and ICQs for convenience or inspiration. Note: all relevant DoD and DLIFLC policies and memos regarding the use of Generative AI in effect at the time of writing have been adhered to. We did not input any course materials developed by DLIFLC into a GenAI tool, and we checked all information for accuracy.

Figure 1 below is an example of the prompt given to ChatGPT and the CCQs it created for a grammar point “比 (to compare),” which some students at the beginner level might find difficult to understand. The English translation is also provided.

Figure 1

Asking ChatGPT to Generate CCQs for Grammar “比” Meaning “to Compare” (OpenAI, 2024)

请用简单的中文给我三到四个语法“比”的Concept checking questions

 以下是关于“比”字句的三到四个语法概念检查问题（CCQs），用简单的中文：

1. 比较的对象
 - 句子里有几个比较的对象？
(比如：“他比我高。”有两个：他和我。)
2. 比较的结果
 - 句子里谁更怎么样？
(比如：“这本书比那本书便宜。”谁更便宜？这本书。)
3. 是否可以加形容词
 - “比”后面能不能加形容词？比如：高、快、好？
(比如：“这辆车比那辆车快。”可以加“快”。)
4. 顺序是否正确
 - 比较时，先说谁，再说谁？
(比如：“她比他聪明。”先说“她”，再说“他”。)

这些问题简单明了，适合帮助学生理解“比”字句的基本用法。

English translation:

Prompt: Please provide me with three to four Concept-Checking Questions (CCQs) for the grammar point “比 (to compare)” using simple Chinese.

ChatGPT: Here are three to four CCQs about the grammar of “比 (to compare)” sentences, explained in simple Chinese:

1. Objects of Comparison

- How many objects are being compared in the sentence?
(For example: “He is taller than me.” There are two: He and I.)

2. Result of Comparison

- In the sentence, “Who is more [something]”?
(For example: “This book is cheaper than that one.” Which book is cheaper? This book.)

3. Adding Adjectives

- Can an adjective be added after “比”? For example: tall, fast, good?
(For example: “This car is faster than that car.” You can add “fast.”)

4. Correct Word Order

- When drawing comparisons, who is mentioned first, and who is mentioned second?
(For example: “She is smarter than he.” You mention “her” first, then “him.”)

These questions are simple and clear, making them suitable for students to understand the basic usage of “比 (compare)” sentences.

It is important to note that, overall, the above questions and answers generated by ChatGPT are inspiring and satisfying, but the answer to question three is not accurate.

CCQs one, two, and four are excellent questions for the following reasons. CCQ 1 emphasizes the objects of comparison, which are crucial for the sentence's meaning. CCQ 2 highlights the result, which is the main idea. CCQ 4 examines the word order, where English and Mandarin can be similar or different, potentially leading to confusion or errors.

However, in the sentence in CCQ 3, “这辆车比那辆车快 (This car is faster than that one),” the adjective does not directly follow 比, but instead the noun phrase “that car (那辆车).” Therefore, teachers need to be cautious and revise accordingly. We can change the answer to “not directly after,” highlighting the correct word order, or revising the question to below and emphasizing the part of speech. This revised CCQ3 can be seen in Figure 2.

Figure 2

ChatGPT's CCQ3 Revised by the Teacher for Accuracy

3. 比较用的词

- 句子里用什么样的词表示比较的结果？
(比如：高、快、好——它们是什么样的词？形容词。)

English translation:

3. Words Used for Comparison

- What kind of words are used in the sentence to show the result of a comparison?
(For example: Tall, fast, good—what kind of words are they? Adjectives.)

Based on the experiment above, GenAI satisfactorily completed the task despite minor errors and provided concise CCQs in simple Chinese. Foreign language instructors can try it out, especially if they find it challenging to generate such questions themselves. An important tip is to ask GenAI to generate questions and answers in simple, easy-to-understand language. It is also important to carefully check the accuracy of ChatGPT output before using it with students.

CONCLUSION

The use of CCQs and ICQs has become a prominent topic in language education. Incorporating these techniques throughout lessons is a fundamental skill emphasized in the Cambridge CELTA program, which trains instructors to teach English as a second or foreign language. Similarly, this approach is highly effective for teaching other foreign languages, particularly in immersion settings and at the beginner level.

At DLIFLC, instructors can enhance students' understanding and ensure effective target language acquisition by utilizing CCQs and ICQs. Instead of relying on generic prompts like "Got it?" or "Understand?" teachers can employ these targeted strategies to promote comprehension and engagement. If you find it challenging to generate such questions, GenAI can serve as a helpful teaching assistant. However, these tools can produce inaccurate information, so teachers must review and refine the questions. With practice and experience, instructors will become more adept at spontaneously creating CCQs and ICQs during classroom interactions.

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